TRASH CAN & FIREWOOD STORAGE UNIT
Taking out the trash and chopping firewood can be two chores no one really enjoys. And most people don’t want the sight of trash cans and firewood to be part of their backyard landscape. Pressure-treated Southern Pine offers an answer to both concerns. Use it to build a handy storage unit to organize the woodpile and conceal the trash containers. This project plan will show you how.

This plan was designed to hold two 20-32 gallon containers. You can easily adjust the dimensions of this unit to fit a convenient location at your home or to handle larger, oversized containers.

**TOOLS REQUIRED**
- Circular or crosscut saw
- Hammer
- Square, level
- Screwdriver
- Carpenter’s rule or tape

**MATERIALS LIST**
To build this storage unit, you will need the following quantities of pressure-treated Southern Pine lumber:

<table>
<thead>
<tr>
<th>NUMBER OF PIECES</th>
<th>MATERIAL</th>
<th>LENGTH</th>
<th>SERVICE CONDITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2x4</td>
<td>8'</td>
<td>Ground Contact</td>
</tr>
<tr>
<td>6</td>
<td>2x4</td>
<td>12'</td>
<td>Ground Contact</td>
</tr>
<tr>
<td>2</td>
<td>2x4</td>
<td>10'</td>
<td>Above Ground</td>
</tr>
<tr>
<td>1</td>
<td>2x4</td>
<td>12'</td>
<td>Above Ground</td>
</tr>
<tr>
<td>2</td>
<td>2x2</td>
<td>6'</td>
<td>Above Ground</td>
</tr>
</tbody>
</table>

Plus:
- 3 sheets, 4’x8’, pressure-treated plywood siding, pattern T-111, 1/2” thick.

**OTHER MATERIALS NEEDED**
- 6d, 10d hot-dip galvanized or stainless steel nails (See Fastener Advisory)
- Two pairs of 3” galvanized butt hinges, with screws of your choice
- Door handles and closure hardware (lock & hasp)
- Construction adhesive for pressure-treated wood
- Water-repellent sealer
- Roofing materials: (to cover 20 sq.ft.)
- One sheet, 4’x8’, sheathing plywood, 1/2” thick
- Roofing felt
- Asphalt or fiberglass shingles
- Roofing nails
- Galvanized roof ridge, 6’ long

**ADVISORY:**
Fastener & Connector Performance for Treated Wood

Metal products in contact with pressure-treated wood must be corrosion resistant. Examples include flashing, termite shields, fasteners (e.g. nails, screws, and bolts), and all connecting hardware (e.g. joist hangers, straps, hinges, post anchors, and truss plates).

The International Residential Code, Section R319.3 states, “Fasteners for pressure-preservative treated wood shall be of hot-dipped galvanized steel, stainless steel, silicon bronze or copper. Exception: One-half inch (12.7mm) diameter or greater steel bolts.”

Traditionally, the treated wood industry has recommended hot-dip galvanized or stainless steel fasteners and connectors for wood products treated with Chromated Copper Arsenate (CCA). Hot-dip galvanized or stainless steel fasteners and connectors continue to be recommended for use with alternative wood preservatives (e.g. Alkaline Copper Quat – ACQ – and Copper Azole), but additional clarification is needed to ensure adequate corrosion protection. Type 304 or 316 stainless steel is recommended for maximum corrosion resistance in more severe exterior applications, such as swimming pools and saltwater exposure. Furthermore, stainless steel fasteners are generally required below grade for permanent wood foundations.

Hot-dip galvanized fasteners and connectors are generally acceptable for above grade applications. Hot-dip galvanized fasteners should meet ASTM A153 (with 2 ounces of zinc coating per square foot minimum for marine use) and hot-dip galvanized connectors should meet ASTM A653, Class G185 sheet with 1.85 ounces of zinc coating per square foot minimum. Fasteners and connectors used together should be of the same type (e.g. hot-dip nails with hot-dip joist hangers).

Do not use standard carbon-steel or aluminum products in direct contact with pressure-treated wood. Spacer materials or other physical barriers are recommended to prevent direct contact. In addition, electroplated galvanized metal products generally have a thinner layer of protection compared to hot-dip galvanized and are typically not accepted by the building codes for use in exterior applications.

Fasteners and connectors coated with proprietary anti-corrosion technologies (other than stainless steel or hot-dip galvanized) are also available for use with treated wood. Consult individual hardware manufacturers for specifics regarding the performance of their products with treated wood.
CONSTRUCTION STEPS

1. Pre-cut the following 2x4 pieces you will need:
   - From the 8’ 2x4, cut 3 bottom frame supports, each 2’-2½” long.
   - From one of the 12’ 2x4s, cut the remaining bottom frame members; cut 2 pieces 3’-10½” long and 2 pieces 1’-9” long.
   - From another 12’ 2x4 (.40 pcf), cut the 2 rear corner posts each 4’-1” long, plus 1 front corner post 3’-3” long. Refer to plan for roof slope; cut 2x4 tops to match.
   - From another 12’ 2x4 (.40 pcf), cut front and rear center supports 3’-8” and 2’-11” long, respectively. Notch them at the top to receive 2x4 brace. Refer to plan. Also, cut the other front corner post 3’-3” long.
   - From the single 12’ 2x4 treated to a .25 retention level, cut the front and rear top supports (5’-9” long).
   - From each of the two 10’ 2x4s, cut two rafters 3’-4” long and one end brace 2’-2½” long. Refer to plan for roof slope and notching required to make rafters.

2. Build the 2x4 frame according to the plan. Using 10d nails and construction adhesive, assemble bottom frame, add corner, and center posts. Check to be sure frame remains level and square.

3. Locate position of end braces and attach to corner posts using 10d nails. Rear end of brace should be flush with rear corner posts. Refer to plan.

4. Install 2x4 top supports (front and rear), fitting them to the notched center posts. Nail to center posts. Toe-nail to corner posts. End-nail front support to braces. Use 10d nails and construction adhesive. Check again for level and square.

5. At rear corner posts, use scrap 2x4 material to add blocking between end braces and rear top support. Attach to corner posts using 10d nails.

6. Toe-nail rafters into place, evenly spacing them across span of top supports. Use 10d nails and construction adhesive. End rafters can also be attached to corner posts. Refer to plan.

7. Cut a panel of the treated plywood siding to 4’-0”x6’-0”. Attach to rear corner and center posts using 6d nails and construction adhesive. Tops of plywood panel and posts should be flush.

8. Cut six floor deck boards from the three remaining 12’ 2x4s (.40 pcf). Notch front and rear members (as required) to fit around center posts. Position floor deck members 1” apart; refer to plan. Recess front member 1/2” for door. Attach floor deck to bottom framing using 10d nails and construction adhesive.

9. Cut treated siding panels to fit sides. Position them between corner posts and flush with bottom frame and end rafter. Attach to frame and rafter using 6d nails and construction adhesive.

10. Also from the treated siding, cut a square panel 2’-4” on a side to make divider panel. Attach to center posts using 6d nails and construction adhesive.

11. Build the two doors. Cut two plywood panels, each measuring 1’-10½” wide by 2’-3” high. Using 6d nails and construction adhesive, attach 2x2 frame to inside of panel. Frame is flush with plywood edges on three sides; allow siding to extend 2” at bottom to clear floor deck.

12. Attach door to posts with galvanized butt hinges. Door siding panel and frame of units should be flush when doors are closed. Add your choice of door handles and closure hardware. Refer to details on plan. Fabricate a door stop using scrap plywood siding; attach to front top support with 6d nails and construction adhesive.

13. Install the roof. Attach 1/2” sheathing plywood to rafters using 6d nails and construction adhesive. This panel should cover the area outlined by the corner posts and rafters. Cover with roofing felt, then your choice of shingles; use roofing nails. Attach galvanized roof ridge to the rear corner and center posts using 6d nails.

14. Construction is complete. Apply a coat of water-repellent sealer to all exterior surfaces and to the floor deck.

These plans and the information contained herein will help you achieve the best possible results in working with Southern Pine lumber products. The conditions under which lumber is used in construction vary widely, as does the quality of workmanship. Since neither the Southern Pine Council nor its members control the method of use or the quality of workmanship in structures built with lumber, they do not warrant lumber performance or design in completed structures.